

Chicago
Occupational
Health & Safety
Job # 635
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162DC
TELEGRAM WUX LB LEMONT, ILL.

OPERATED BY THE UNIVERSITY OF CHICAGO
BOX 299 LEMONT, ILL.
TELEPHONE LEMONT 800

March 20, 1959

12.19
INDUSTRIAL HYGIENE & SAFETY

Info _____
RECD MAR 20 1959
Reply _____
Log _____ File KAISER AL

To: J. R. Novak Industrial Hygiene & Safety
From: C. S. McKee Industrial Hygiene & Safety
Subject: Extrusion of Billets, Kaiser Aluminum Corporation, Dolton,
Illinois

C. S. McKee monitored the extrusion of three CP-5 type fuel elements on February 17, 1959. The extrusion operation was accomplished at the Kaiser Aluminum Corporation, Dolton, Illinois. The extrusions were carried out by Kaiser personnel under the supervision of L. C. Hymes (MET) and T. N. Czaplicki (MET). Normal U_3O_8 was used in the elements.

The billets had been transported to the plant by Mr. Hymes on February 16. The billets had been placed in the furnace overnight in order to obtain the proper temperature for extrusion.

Mr. McKee made a preliminary survey of the area around the press and run-out table before the operation began. No activity was detected in this survey.

An air sample was collected during the entire operation. This sample revealed no long lived airborne activity.

A survey of the area around the press and run-out table was made following the operation. No activity was detected in this survey.

The press, furnace and run-out table were the only facilities used.

C. S. McKee

CSM:ni

Att.

cc: L. C. Hymes, w/att.
A. G. Januska, w/att.
G. T. Lonergan, w/att.
R. A. Noland, w/att.
Reading File, w/o att.
File, w/att.
CF, w/o att.

Location	Requester	Surveyor	Request		Results
Billet #	Time Extruded	Tape Shear of Plate	Portable Instrument Survey		Remarks
			BCTA-Gamma	Alpha	
F2	0925	NAD	11/1" HFS	NAD	SLIGHT RIBBLING OF CLADDING
PUSHED CLEANOUT BILLET	1000	NAD	NAD	NAD	EXTRUDED TUBE SURVEYED BOTH INSIDE & OUTSIDE.
F1	1015	NAD	15/1" HFS	3-4 M	BAD TEARING OF CLADDING
F3	1020	NAD	14/1" HFS	10-20 M	ROUGH BLISTERING OF CLADDING.
PUSHED CLEANOUT	1030	NAD	NAD	NAD	SURVEYED BOTH INSIDE AND OUTSIDE.

AIR SAMPLE DATA

1. DATE 2-17-59	5. TIME ON 0925	6. TIME OFF 1115	7. RUN TIME 110 MIN	10. SUSPECTED ACTIVITY 11. URANIUM (NOR.)		14. PROTECTION WORN SUPPLIED AIR <input type="checkbox"/>		15. FIRST COUNT COUNT $\frac{\beta\gamma}{\alpha}$ =	
2. ROOM 8000 T Press	8. FLOW RATE 15 M³/hr + 60			12. MPC OPG 2-70 d/m/M ³		ASSAULT MASKS <input type="checkbox"/>		16. FINAL COUNT FRACTION OF	
3. BLDG. KAISER ALUMINUM	} = 25 M³/min cfm ÷ 35.4			13. MPC OPG B-2200 d/m/M ³		RESPIRATORS <input type="checkbox"/>		a $\beta\gamma$	
4. OPERATION CODE	9. SAMPLER TYPE F.O.	10. VOLUME 27.5 M ³				NONE <input checked="" type="checkbox"/>		MPC OR OPC (whichever used)	
								≥ 1X <input type="checkbox"/> <input type="checkbox"/>	
								≥ 10% <input type="checkbox"/> <input type="checkbox"/>	
								< 10% <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	

17. REMARKS: TAKEN DURING EXTRUSION OF THE CP-5 TYPE FUEL RODS
CONTAINING NORMAL U_3O_8 AT KAISER ALUMINUM CORP, DOLTON, ILL.

[illegible]